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OLDEST PAPER IN AMERICA

BEE JOURNAL

GEORGE W. YORK, Editor. DEVOTED EXCLUSIVELY TO BEE-CULTURE. Weekly, \$1.00 a Year. Sample Free.

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Anti-Adulteration Bill.—Mr. Jas. A. Stone, the indefatigable Secretary of the Illinois State Bee-Keepers' Association, on Feb. 6th, sent us a copy of a Bill that was to be placed in the hands of the members of each branch of the State Legislature the next day. It is directed against every form of adulterated honey and its sale, and reads thus:

An Act to Prevent the Adulteration of Honey:

SECTION 1. Be it enacted by the people of the State of Illinois, represented in the General Assembly, That it shall be unlawful for any person or persons to adulterate honey by mixing with it any sweets of whatsoever kind, not gathered from flowers or blooms; or to mix together any such sweets, whether with or without honey, or cause it to be done by any agency whatsoever, and to offer for sale, or sell without labeling it with the true name of its component parts, with the proportion of each, and with the name and location of the manufacturer.

SEC. 2. Any person or persons convicted of a violation of any of the provisions of Section 1 of this Act, shall be deemed by the court guilty of misdemeanor, and shall be fined in any sum

not less than one hundred dollars (\$100), and not more than five hundred dollars (\$500), one-half of said fine to go to the informer, and the other half to the school fund.

This a move in the right direction. Once give the Bee-Keepers' Union a good law to use against the adulterators of honey, and there will be lively times ahead for that kind of evil-doers. The Bill should become a law at once, and then be brought to bear upon those who would tamper with pure honey. Down with every form of adulteration! Give the American people what they demand above all things, *pure* and unadulterated food!

The Victorious Union.—Once more the National Bee-Keepers' Union has fully demonstrated its great value to the industry of bee-keeping. Whether its influence is brought to bear upon local decisions or State Legislation, it is alike successful in each. The following is from the General Manager, and will be encouraging reading:

FRIEND YORK:—The members of the National Bee-Keepers' Union will be pleased to learn through the columns of the **AMERICAN BEE JOURNAL** of the result of the "first round" for the year 1893, in the battle with the enemies of the pursuit of bee-keeping.

On Jan. 16th, as soon as the Senate of Missouri got to work, Senator Sebree introduced the following, entitled, "An Act to regulate the keeping of Honey-Bees in Cities, Towns and Villages in this State, and to provide a penalty for

its violation." The full text is as follows:

Beth Enacted by the General Assembly of the State of Missouri, as follows:

SECTION 1.—No person shall own, keep or have in his possession or under his control, any honey-bees in boxes, bee-gums or other thing of confinement in any city, town or village in this State, whether organized under general or special charters, nearer than fifty (50) feet from the line of any adjacent real estate owner, or person in possession of such adjacent property.

SEC. 2.—Any person violating the provisions of the preceding section shall upon conviction be fined for each offense not less than ten nor more than twenty dollars, and each offense shall be deemed a period of one week after one notice in writing shall have been given to the owner or person in possession of the bees to remove the same to a distance provided by the first section of this act; and if after notice the owner or owners or party in possession of said bees, it shall be the duty of the sheriff of the county, or the constable of the township, in which the offense is committed to remove the said bees to the said distance of fifty feet, and for reasonable compensation for his services he shall have an act of debt against the owner or person in possession of said bees, and the said bees, nor the boxes or bee-gums, or thing in which they shall be kept, shall be exempt from execution to pay the judgment founded upon such claim for said services for removing the same as aforesaid.

SEC. 3.—If the said honey-bees cannot be removed and kept in boxes, bee-gums or other thing at a greater distance than fifty feet from the line of the adjacent owner or proprietor, as provided by Section 1 of this Act, then in such event the keeping of them in such city, town or village is absolutely prohibited, and after ten days, notice in writing to remove the same, the owner or person in possession or control of them shall be punished upon conviction, as provided by Section 2 of this Act.

Here is a clear case of prohibition of the pursuit in all "Cities, Towns and Villages" in Missouri, if it should become law, for a bee-keeper must have OVER 100-foot lot to be able to keep his bees "fifty feet from the line of any adjacent real-estate owner, or person in possession of such adjacent property." But few bee-keepers would have more than 50 feet in all.

Mr. W. S. Dorn Blaser, ex-Secretary

of the Missouri Bee-Keepers' Association, sent the "Bill" to the Manager of the Union, and instantly the Decision of the Supreme Court of Arkansas was brought into play like a Gatling-gun, and copies of it were sent to the members of the Legislature and to the Governor. Letters were written to them advising them not to allow it to pass, showing that it would be a dead letter, as it was unconstitutional, and would be so construed by the Courts, as they had the precedent of the Arkansas Supreme Court to guide them.

The Hon. R. L. Taylor, President of the Union, was appealed to, and he backed up the General Manager by giving his "opinion" on the Bill—that it was unconstitutional, and should be "fought to the end" vigorously.

Mr. Joseph G. Banning, President of the Missouri State Bee-Keepers' Association, also appealed to the Manager of the Union, and was instructed to fight the Bill at every step—that the Union would see him through, etc. If this passed both houses, then the Governor had been appealed to, and would probably have vetoed it. President Banning writes me thus: "I thank you for your prompt assistance."

When it came up in the lower House the Legislators were "posted," and promptly killed it. And thus another chapter in the "Comedy of Errors," of the enemies of apiculture. The Union is again triumphant, and adds "another feather in its cap."

A similar "farce" is now being enacted in Nebraska, but it will doubtless end in a like fizz. Bee-keepers have right to be proud of the achievements of their Union for Defense.

THOMAS G. NEWMAN,
General Manager.

Separators.—The following questions have been sent us about the usual width and thickness of separators:

"Will you kindly let me know what the usual width of separators—wood and tin—for use with one-pound sections? Also, the usual thickness of wooden separators? It seems to me that the inset is scarcely deep enough to permit separators to be used full depth of section, say 4½ inches."

The usual width of separators for 4½ inch sections, whether the separators are wood or tin, is 3½ inches. Wooden separators are one-twentieth to one-tenth of an inch thick—perhaps most all being one-sixteenth.

Nameless Bee-Disease.—
Chester Belding, of Claremont, Va., asks these questions about the so-called Nameless Bee-Disease:

Can you give any information about "nameless bee-disease," or where bees turn black and shiny, and other bees in the same hive fight and kill them? Do they hatch out in that condition, or do they become so with age? Does changing combs from one hive carry the disease with the bees? Is there any known cure or remedy for it? My bees have been but recently troubled thus far with it. Please answer in the BEE JOURNAL.

CHESTER BELDING.

There is a good deal of difference of opinion about the nameless disease, some thinking the queen at fault, and a number of cures have been reported as a result of changing the queen. Allowing the bees access to salt water has been reported a cure. Others, however, who have had considerable experience, report that the disease disappears of itself when left alone, and think that in the cases where the trouble ceased upon changing queens, it might have ceased entirely soon in the same cases had no change of queens been made.

Perhaps the majority are in favor of changing queens. It is quite possible that the disease is more virulent in some than others, as some look upon it as a very serious matter.

The bees do not hatch out with the black, shiny appearance, neither does it come from the result of age, for such bees are generally found with perfect wings.

Bee in Bee-Cellars, Etc.—
E. S. Miles, of Denison, Iowa, asks a question about mice troubling bees in the cellar; its answer will serve to apply to similar questions that we have received:

I have never seen anything in the bee-hives about mice injuring bees in the cellar, where they can get into the hives? The day, lately, as I was holding a comb so as to shine into the bottom of a

hive, a mouse jumped out from between the combs almost amongst the bees. I saw where they had been eating dead bees, and other signs of their being under the combs.

As most of the writers advise leaving the bottoms off, or large entrances, I don't see how a person can keep them out of the hives in the cellar; and it is pretty hard to have a mouse-proof cellar.

That article by the Chinese contributor, on page 858 (1892), was quite a diversion. I hope we will hear from him some more.

We are having some zero weather here now (Jan. 13), with plenty of snow on the ground. The coldest it has been yet is 12° below zero. E. S. MILES.

Yes, indeed, mice will do plenty of damage if allowed to get into hives in the cellar. They will eat live bees, and they will eat honey, but perhaps the greatest damage done by them is the gnawing of the combs. They will gnaw great holes in the combs, and build nests there, in which they no doubt find it very comfortable.

As you say, a mouse-proof cellar is not easily had, but you can do much by way of persistent trapping, and also by giving the mice a diet of some kind spiced with poison, as thin slices of cheese sprinkled with strychnine, cut up into little cubes and placed where the mice can get it conveniently.

The best thing is to bar them out of the hives. With an ordinary entrance that is easily done by means of heavy wire-cloth, having the meshes about one-third of an inch. The same wire cloth may be used full size of the bottom if the hives are left without bottom-boards.

You may like the plan devised by Dr. Miller. He has reversible bottom-boards. One side of the bottom-board is a plain, flat surface, on which the hives rest during summer. The other side is a shallow box an inch and a half or two inches deep, open at the front end, where a piece of wire-cloth closes the entrance.

Don't close the entrance with wire-cloth of fine mesh that will not allow the bees to get through, for in that case the bees that try to get out and find

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Don't close the entrance with wire-cloth of fine mesh that will not allow the bees to get through, for in that case the bees that try to get out and find

themselves penned in will make the others uneasy.

We have another article from that Chinese contributor, which we will publish as soon as we have room for it.

Queen Questions.—S. A. Smith, of Blue Springs, Nebr., asks these questions, and requests that they be answered in the BEE JOURNAL:

1. When is the best time to re-queen an apiary?

2. Is a queen that is reared out of the natural swarming season as good as one reared during the swarming season?

3. Is a queen that is reared in the South as good as one reared in our own latitude?

S. A. SMITH.

1. The question as to whether the apiarist should take into his own hands the matter of renewing his queens or leaving it in the hands of the bees is one on which all are not agreed. Perhaps the majority leave it to the bees. But if you decide to supplant all your queens, perhaps you will find no better time than during the harvest, or near its close. If you are as successful as some, and get the new queen to laying within 48 hours after the removal of the old, you will see that very little will be lost by the change in any case.

2. As a rule, no. But whether a queen *may* be reared out of the swarming season which shall be as good as any, is quite another question. Many insist, and perhaps rightly, that by having proper control of conditions the bee-keeper may secure just as good queens at a time when bees left to themselves would rear one.

3. Many queens raised in the South have been sent North, and there seem no adverse reports about them.

Self-Hivers is to be the "special topic" of the March *Bee-Keepers' Review*.

Read our great offer on page 261.



MOSES QUINBY.

To many of the present readers of the AMERICAN BEE JOURNAL, the name of Quinby is almost unknown; but to those who are acquainted with the bee-keeping of 25 or more years ago, the one whose picture is shown on the opposite page is indeed well known.

It is well for us all to often turn back our thoughts to other days and times, lest we forget "the pit from which we were digged," or the struggles and sacrifices endured by others, so that to-day it might be possible for us to enjoy the unnumbered blessings which are the results of the untiring efforts of those who have long since passed from the field of activity. As in other pursuits, so it is in bee-keeping, and hence we this week feel that with no little pleasure will be read the following account of Moses Quinby—one of the Princes in the realm of bee-culture a quarter of a century ago. Once more we are indebted to that peer in enduring apicultural literature—the "A B C of Bee-Culture"—for these paragraphs telling of a noble man and his nobler life:

Moses Quinby was born April 16, 1810, in Westchester county, N. Y. While a boy he went to Greene county, and in 1853 from thence to St. Johnsville, Montgomery county, N. Y., where he remained until the time of his death, May 27, 1875.

Mr. Quinby was reared among Quakers, and from his earliest years was ever the same cordial, straightforward, and earnest person. He had no special advantages in the way of obtaining an education, but he was an original thinker, and of that investigating turn of mind which is always sure to educate itself,

even without books or schools. When about 20 years old he secured for the first time, as his own individual possession, sufficient capital to invest in a stock of bees, and no doubt felt enthusiastic in looking forward hopefully to a good run of "luck" in the way of swarms, so that he could soon "take up" some by the aid of the brimstone-pit. But "killing the goose that laid the golden egg" did not commend itself to his better judgment, and he was not slow to adopt the better way of placing boxes on the top of the hive, with holes for the as-

practical experience in handling and studying the bees themselves, as well as the books, he was not merely a bee-keeper, but a bee-master; and with that philanthropic character which made him always willing to impart to others, he decided to give them, at the expense of a few hours' reading, what had cost him years to obtain, and in 1853 the first edition of "*Mysteries of Bee-Keeping Explained*," made its appearance. Thoroughly practical in character, and vigorous in style, it at once won its way to popularity.



MOSES QUINBY.

cent of the bees, and these boxes he improved by substituting glass for wood in the sides, thus making a long stride in the matter of the appearance of the marketable product.

With little outside help, but with plenty of unexplored territory, his investigating mind had plenty of scope for operation, and he made a diligent study of bees and their habits. All the books he could obtain were earnestly studied, and everything taught therein carefully tested. The many crudities and inaccuracies contained in them were sifted out as chaff, and after 17 years'

From the year 1853, excepting the interest he took in his fruits and his trout-pond, his attention was wholly given to bees, and he was owner, or half owner, of from 600 to 1,200 colonies, producing large crops of honey. On the advent of the movable-frame and Italian bees, they were at once adopted by him, and in 1862 he reduced the number of his colonies, and turned his attention more particularly to rearing and selling Italian bees and queens. In 1865 he published a revised edition of his book, giving therein the added experience of 12 years. He wrote much for agricul-

tural and other papers, his writings being always of the same sensible and practical character.

The Northwestern Bee-Keepers' Association, a body whose deliberations have always been of importance, owed its origin to Mr. Quinby, who was for years its honored President—perhaps it is better to say its honoring President, for it was no little honor, even to so important a society, to have such a man as President. In 1871 Mr. Quinby was President of the North American Bee-Keepers' Association.

It is not at all impossible that the fact that so many intelligent bee-keepers are found in New York, is largely due to there being such a man as Mr. Quinby in their midst. The high reverence in which he was always held by the bee-keepers, particularly those who knew him best, says much, not only for the bee-master, but for the man.

On the occasion of the first meeting of the Northeastern Society, after the death of Mr. Quinby, Capt. J. E. Hetherington said, in his address, in a well-merited eulogium on Mr. Quinby: "Of the great amount of gratuitous labor performed by him, to advance the science of bee-culture, the fraternity as a whole will never know, nor can they realize the information imparted to the numbers who flocked to see him personally, especially in the busy season."

"His life has been in every sense a life of usefulness, and not wholly devoted to the interests of bee-culture, for he took a living interest in any movement he thought would benefit society; and as an advocate and helper in the temperance work he did no mean service. He possessed true kindness of heart, and regarded it as a religious duty to make all better and happier with whom he came in contact, and regarded that life a failure that did not leave the world the better for having lived."

The Review will please accept our thanks for the very kindly reference contained in the following paragraph, which it published in its Jan. number:

The AMERICAN BEE JOURNAL is bound not to fall behind. Each issue is to contain a portrait and biographical sketch of some apicultural celebrity. There is nothing like a face to face meeting, and the hearty hand clasp, but even these are rendered still more pleasant by having first seen the portrait and read the sketch.

THE LAND OF DZIERZON

CONDUCTED BY

H. REEPEN,

JUGENHEIM, HESSEN, GERMANY.

Introduction.

I suppose I ought to make some "introductory remarks," but I hate introductions, so I will only express the wish that the highly-esteemed bee-keeping friends in America may be interested in the contents of this new department in the "Old Reliable." H. REEPEN.

European Doings.

ALCOHOLIZED WAX.—Weygandt, the self-styled inventor of artificial heating of bee-houses, if he wants a colony to build as quick as possible new combs, uses wax alcoholized to a very fine powder. He puts it simply on the bottom inside the hive, and the bees take it willingly and carry it up to the combs. But if the wax is not powdered in a very fine way, the bees do not care for it.

A NEW FOUL BROOD REMEDY.—Creoline has turned out to be a good remedy for foul brood. Take a bottle of water and put some Creoline into it, so that the mixture is about 4 per cent.; sprinkle the hive, combs and bees once or twice a week. If the foul brood is very bad, sprinkle all the bees going in the entrance, three or four times a day, so that the antiseptic is constantly carried through all parts of the hive.

DRONE MATING WITH A WORKER.—I shortly read in the AMERICAN BEE JOURNAL that it was impossible, and it never could happen, that a drone-bee could mate with a worker-bee. In the year 1883 the rector Anton Kremer, at Schrodau, Provinz Posen, found close to his bee-house, a drone-bee mated with a worker-bee. As he never had heard of such a case, he immediately sent this couple to Schonfeld, the famous beesavant and microscopist, and he could only ascertain the fact. As far as I know, this couple is still in possession of Schonfeld.

B. REEPEN.



CONDUCTED BY

Mrs. Jennie Atchley,
GREENVILLE, TEXAS.**Worst Weather for a Long Time.**

We are to-day having the worst weather for a long time, at this season of the year. The mercury is down to 28° above zero, and ice is hanging on the fruit-trees and the houses. Well, I guess we can't always have pleasant sunshine. The bees are as still as midnight, but I think they will soon have good weather again.

JENNIE ATCHLEY.
Greenville, Tex., Feb. 15, 1893.

Bee-Keeping in Mississippi.

We had a very poor season in this locality last year, on account of a cold, wet spring. Our spring honey-flow usually begins about May 1st, and continues about six weeks; but last season, during the most of the time, it was cold, rainy weather, and previous to that it was also cold and wet.

Our fall flow gave the bees plenty to winter on. My surplus, last season, averaged about 16 pounds per colony. I use Root's dovetailed hives, and am well pleased with them.

I enjoy the reading of the AMERICAN BEE JOURNAL very much, and especially "In Sunny Southland" department, because there are so few in this part of our country that take any interest in apiculture. I would be glad to see more correspondence from this State. I sometimes think that the bee-keepers of Mississippi should have a convention, and try to let our brethren of other States know what we are doing, or rather see what we can do here with bees. I am satisfied that we have a very good honey country, but its resources have never been developed. Our people devote most of their time and attention to cotton.

B. F. LEWIS.

Lewisburgh, Miss., Jan. 23, 1893.

Our School in Bee-Keeping.**THIRD LESSON—PREPARING FOR THE HONEY-FLOW.**

Now, as we have got both our hives equipped with two crates of sections, we will watch closely, and as soon as the top crates are finished and nicely capped clear to the wood of the section all around, take off the top one, and if the honey-flow continues, we will raise the remaining crate and place an empty one under as before; and this may be continued as long as the honey-flow lasts. Or here in the South, where one flow comes and is gone, then another comes on before the season closes, we may operate as before.

Two crates are enough to have on any hive, in my opinion, at one time, if the hives are large enough, and we attend to our business as we should.

At the close of the season, and yet before cold weather begins, if we have been successful and secured a fair honey crop, we may sell a portion of the honey, and buy two pure Italian queens from some reliable breeder, and have our bees Italianized ready for winter, and to start next spring with none but the best bees, and we have made our bees self-supporting, as well as some honey left to use, and possibly enough money to their credit to purchase next year's supplies. Snugly fix the little pets for winter, and be sure they have at least 20 pounds of honey and a moderate colony of bees; and now I leave you to run your bees for comb honey alone, next year.

PRODUCING EXTRACTED HONEY.

Now let us produce extracted honey one year. As we now know how to divide our bees, we will work the same as before until the beginning of the honey harvest, then we will place on full-sized upper stories, that is, the same size as the brood-chamber.

Lift two frames from below, and place two filled with foundation in their stead. Place the two frames of brood and bees in the upper story, and in the center, only spread them enough to allow one frame of foundation between them. Fill with frames of foundation, and when the bees get the first upper story cleverly filled, if the strength of the colony and the season or flow will justify it, raise up and place an empty one between as in producing comb honey, filled with frames of foundation as before, leaving two filled with honey as in the first one.

If it is not a powerful colony, and an extra year, you will not need more than 3 stories, and some years 2 will do.

Now listen: When the top story is full, or when the frames are about half capped, extract all the frames in it, and then by this time the bees are well started in the middle story, raise it up and put the newly extracted one in the middle, and so on as long as the flow lasts.

Do not be afraid of a little brood in the upper stories, as I allow my queens to lay where they please in running for extracted honey. Then if the brood is not where we want it, I put it so.

It will surprise you to see the amount of honey you can take from a single colony when run for extracted honey, when a good season comes. I have harvested over 500 pounds from a single colony in a single season, by the above method, but we must not expect that amount often.

Now you have a fine start, and you can Italianize as before, if you choose, and you can quit extracting a little before the harvest closes. And what a nice chance to make some fall colonies with the partly-filled combs, or what a nice start you have for next year!

Now we know how to produce honey, and I will next tell how to sell the crop, and it is a trade to produce it, and a separate trade to know how to sell it.

(Continued next week.)

Bees Stealing Honey.

Some years ago I undertook to put some of my bees on pasture, my own locality, where I lived then, being rather poor for bee-pasture. Consequently, I moved 6 colonies into a yard of one of my old friends, who lived in a country town which was located in a rich bottom. I worked 4 colonies for extracted honey, and 2 for comb honey in sections. I manipulated the bees according to the principles of the improved system of keeping bees for profit.

In the adjoining lot neighbor Jackson had a lot of black bees in box-hives. He put on his honey-boxes where he expected his bees to store the surplus honey, but never controlled swarming or anything else. During that honey season I hauled away from those 6 colonies at least 600 pounds of nice honey, when neighbor Jackson did not get any honey; but he exclaimed "that it is now plain to him, that Z.'s bees have been stealing the honey from the neighboring bees, or it would have been impossible for them to store so much honey."

The spring following I received a letter without a signature, telling me this: "If you want to save your bees, don't bring them down here again; we will not be imposed upon—pasture your own country," etc. I suppose many bee-keepers of the old school would look at the matter in the same way, at this date.

MAXIMILIAN.

Shawnee, Kans.

Eggs in Queen-Cells.

I notice on page 916 of *Gleanings* for Dec. 15, 1892, an article written by Wilder Graham, who seems to convey the idea that the bees move eggs into queen-cells. My experience is different, as I know the queen lays the eggs in the queen-cells just the same as she does in other cells. You may take a queen from a colony that has a dozen queen-cells started, and you will never find a queen reared in one of them, unless it contained an egg before the queen was removed. Then if bees move eggs into queen-cells, why do they not put eggs into the queen-cells already started, rather than to start a queen-cell over an egg or larva?

An egg that is taken from any cell by a bee, is destroyed, and never is again deposited by the bee. Now, my observations may meet with opposition, but, notwithstanding, I am settled on this point.

J. A.

Hybrids vs. Italians for Comb Honey.

Mr. Grover, on page 667 (1892) says: "Hybrids are better for storing honey in sections than the blacks; but for this locality I prefer Italians."

During 1892 I had a strong colony of Italians at an out-apiary, that absolutely refused to work in the sections. They cast a swarm, and partly filled two sections, but did not draw out another piece of foundation in the super. The hive rested upon eight inch blocks, and the bees left it and built combs criss-cross to the under side of the bottom-board. When I found them they had brood enough to fill two frames. As fast as brood hatched in the body, the cells were filled with honey. I put them into another hive on the same stand, and built up another colony with their brood, giving it another queen. Both are now good, strong colonies.

GEORGE MOTT, M. D.
Spurger, Tex., Jan. 12, 1893.



Most Promising Field of Labor for Apiarists.

Query 860.—In your opinion, what is the "most promising field of labor" for apiarists at this stage of the industry of bee-keeping in this country?—Missouri.

I don't know.—P. H. ELWOOD.

We don't know.—DADANT & SON.

The production of honey.—R. L. TAYLOR.

Economy—more honey.—WILL M. BARNUM.

I will not venture an opinion.—MRS. L. HARRISON.

I am not sufficiently posted to even give an idea.—J. E. POND.

The production of gilt-edge comb-honey.—MRS. J. N. HEATER.

This is a large question. An answer would be only an opinion.—EUGENE SECOR.

This is the question that would take a wiser than Solomon to answer.—JAS. A. STONE.

A very indefinite question. Rearing bees and producing extracted and comb honey, I reckon.—M. MAHIN.

Producing honey. If you mean to ask what is the best location for an apiarist, I don't know.—JAMES A. GREEN.

I don't understand the question. Try the corn-field until you can put your question in a better shape.—E. FRANCE.

To overcome the prejudice in the minds of the people as regards all liquid honey being spurious. Increase honey consumption, etc.—J. M. HAMBAUGH.

In Missouri, I don't know; but if you are in a good locality for honey, and understand how to make the bees do just about as you want them to do, you had better produce comb honey; or, if they won't mind you in that line, try extracted honey. But if I were turned loose to produce honey again, I would

look upon producing comb honey as the most promising field for me, as nice section honey never goes begging for a buyer.—MRS. JENNIE ATCHLEY.

At home—in California, Florida, Wisconsin or Colorado. But almost always somewhere else than in your present location, wherever you are.—J. H. LABRABEE.

In the apiary, of course. Where else, or in what other field should an apiarist or bee-keeper labor? If you did not mean this, tell us what you did mean.—G. M. DOOLITTLE.

I hardly know what is meant by the "most promising field of labor." I will venture to say, however, queen-rearing or running a bee-paper, as the "crop" never fails.—C. H. DIBBERN.

Locality and aptitude for some other occupation must govern in all cases. Poultry-keeping in connection with fruit-raising will make a good combination in many localities.—H. D. CUTTING.

I don't know. May be washing dishes, if you're a woman. If you mean inside of bee-keeping, if there is nothing to be made producing honey, then there will be no continued profit in any other department.—C. C. MILLER.

Bee-keeping, to be sure. If other work is to be added, it must be a kind fitted to the person. For me, it is to teach; for Hutchinson, to edit a paper; for Bingham, to make knives and smokers. The thing, in short, that one can do best.—A. J. COOK.

It might be best to go at something else. But in the bee-business I should produce comb and the article extracted, in proportion of one-third of the former and two-thirds of the latter. That has been my plan for a number of years, and it has paid me reasonably well.—G. W. DEMAREE.

I don't understand the question, but will venture to say: Secure all the honey you can in such shape as will best suit your market, and then trade or sell to the best advantage. This plan will likely "promise" the best—if not better than any other rural industries.—J. P. H. BROWN.

I can hardly tell from Query 860 just what you mean. If you mean whether you should produce comb or extracted honey, you will have to determine that by your taste and market. If you mean the best location, look for one with plenty of basswood, clover and wild-flowers, and five or more miles from any large bee-keeper.—S. I. FREEBORN.



Report of the Vermont State Bee-Keepers' Convention.

Written for the American Bee Journal
BY H. W. SCOTT.

At the 18th annual convention of the Vermont Bee-Keepers' Association about 35 members met in the parlors of the Van Ness House, in Burlington, Vt., on Dec. 28, 1892.

The meeting was called to order by President V. V. Blackmer, of Orwell. Prayer was offered by R. H. Holmes, of Shoreham, after which the minutes of the last meeting were read and approved. The President appointed the following committees:

ON NOMINATIONS—O. J. Lowrey, of Jerico; E. J. Smith, of Addison; and M. F. Cram, of West Brookfield.

ON RESOLUTIONS—R. H. Holmes, of Shoreham; W. G. Larrabee, of Larrabee's Point; and J. W. Smith, of Moscow.

The report of the Treasurer showed a small surplus, and the report was approved.

J. H. Larrabee, of Larrabee's Point, being unable to be present, the topic on which he was to speak, was passed over.

BEE-KEEPING AT THE VERMONT AGRICULTURAL COLLEGE.

T. H. Wheatley, of Burlington, spoke on "The Possibility of Bee-Keeping at the Vermont Agricultural College Experiment Station." He told of the efforts he had made to get a few colonies of bees to the station, and his subsequent work with them. Lack of time had somewhat curtailed experiments. Those connected with the station seemed not only willing, but anxious to aid the bee-keepers all that lay in their power, and he did not doubt that some day in the near future, the best honey State in the Union would have a well equipped apiary for experimental work at the State College.

President Blackmer thought that bee-

keepers have been altogether too modest in asking for proper recognition by those in authority. He thinks it is time we ask for our fair share of the moneys appropriated for experimental work.

Some one suggested that a few prominent apiarists be employed to conduct experiments, keeping an accurate account of the same, and be paid for their reports, which reports might be compiled in a bulletin. This was thought to be hardly feasible, as there are so few that would have sufficient appliances to conduct certain experiments.

A committee being appointed for the purpose, visited the Station, made an estimate of the cost of increasing the apiary there to a sufficient size as to be serviceable, and the cost of an Expert Director for the same one year. Their report being received by the convention, a special committee was appointed, to hold office one year, and to confer with the Board of Control of the College. Committee—J. H. Larrabee, F. M. Wright and M. F. Cram.

PERFORATED ZINC AND ITS USE.

Mr. O. J. Lowrey gave an interesting talk on "The Advantages and Disadvantages Attending the Use of Perforated Zinc." He first tried queen-excluders in hiving swarms in contracted brood-nests. He prefers the zinc-wood slatted honey-boards, because they prevent burr-combs. He had used the zinc in drone-traps in out-aparies, also in caging queens in sections. He has had very little trouble in queens going through the zinc, but thinks that there are different sized queens as well as perforations in zinc. Queen-excluders would be a disadvantage if used before swarming.

W. G. Larrabee had used queen-excluders in working for extracted honey, and could scarcely do without them.

HOUSE APIARIES, ABSORBENTS, ETC.

The address on "House Apiaries and How to Use Them," was a very interesting one, given by H. P. Langdon, of East Constable, N. Y. His description of a model house for 200 colonies was illustrated by drawings which made all very plain. He has used it but one season, but likes it so well that he could not be induced to change.

The question of absorbents and upward ventilation was discussed. Many believed that they had been given too much upward ventilation, and had concluded that a circular hole in the honey-board, 3 inches in diameter, is sufficient.

EVENING SESSION.

Eight new members were added to the rolls at this session.

The reports of the members were given, and showed a rather poor season. The number of colonies was increased from 1,382 to 1,823; and 20,548 pounds of comb honey, and 4,100 pounds of extracted honey was reported. There were three other large bee-keepers, unable to be present, who were known to have over 1,000 colonies of bees, and a honey crop averaging with those reported.

THE BEARING OF QUEEN-BEES.

H. W. Scott read an essay on "Queens," which was discussed at length. Few thought forced queens as good as those reared in the natural way during the swarming season. Some had just as good, and others preferred to hatch their queens in a nursery, since they could then select those that looked the best. Some thought that queens reared in a poor season were liable to be inferior to those reared in a good season, while others could see no difference.

MIXTURE FOR SPRAYING POTATOES.

Mr. Crane not being present, Prof. L. R. Jones, of the Agricultural College, was called upon in regard to the spraying of potatoes with a mixture containing molasses and poison. The mixture is used to spray the potato tops in July and August to prevent blight. Prof. Jones was not sure that the addition of the molasses was of any value, and he thought it was quite probable that it would be unnecessary to use it. The association adopted the following resolution in regard to the matter:

Resolved, That we as bee-keepers apprehend danger from the addition of sugar to poisonous solutions used in spraying potatoes.

A vote of thanks was also tendered to Prof. Jones, in recognition of his evident willingness to assist the bee-keepers.

MORE UNION AMONG BEE-KEEPERS.

The discussion on, "How Shall We Create More Union Among Bee-Keepers?" was more of a rambling talk than discussion. The necessity of urging fellow bee-keepers to attend the annual meetings, was one good point. The harm done by small producers selling honey at a very low figure, thus destroying the market and the possibility of forming some union to buy up such honey, was talked over.

SECOND DAY—MORNING SESSION.

A discussion of the Porter bee-escape brought out the fact, that they are the best escape yet used by any members of this Association; especially in the taking off of extracted honey they are almost indispensable for rapid, easy work. There is a difference in seasons as to the time it takes for the bees to pass through the escapes.

VERMONT WORLD'S FAIR APIARIAN EXHIBIT.

The World's Fair Committee reported that it had been difficult to get any definite answer from the State Commissioners. The latest letters had been more favorable, and he thought it would be possible to send an exhibit if we could get a small appropriation. There was some doubt as to space being assigned to hold until July, the earliest date that it could be filled by Vermont honey. It was the general opinion that there would be room found for it, if an exhibit of Vermont honey should be sent at any time.

O. J. Lowrey and V. V. Blackmer were added to the committee of last year, which was R. H. Holmes, J. E. Crane and H. W. Scott; and the committee was elected and given power to act for the Association in all matters relating to an exhibit of honey at the World's Fair under the auspices of the Vermont Bee-Keepers' Association; to secure moneys and honey for an exhibit, etc.

ELECTION OF OFFICERS.

The committee on nominations reported the following for officers:

President—W. G. Larrabee, Larrabee's Point.

Vice-Presidents—Addison county, E. J. Smith, of Addison; Chittenden county, O. J. Lowrey, of Jerico; Franklin county, F. M. Wright, of East Enosburgh; Lamoille county, J. W. Smith, of Moscow; Orange county, M. F. Cram, of West Brookfield; and Rutland county, H. L. Leonard, of Brandon.

Secretary and Treasurer—H. W. Scott, of Barre.

The report was accepted, and the Secretary instructed to cast one ballot for the same, which, being done, they were declared elected.

Besolutions were reported and adopted as follows:

Resolved, That we as bee-keepers here assembled feel thankful to the Almighty Father for our health, happiness and prosperity; and, that we are permitted to meet for the improvement of our

minds and the advancement of our profession; and hope that we may have many more years of health and happiness.

Resolved. That we express our hearty thanks to the C. V. R. R. Co., for their accommodations, and to the proprietor of the Van Ness House for our cordial entertainment, and the use of the room for holding the meeting, and to the Executive Board of the Association for their untiring efforts in preparing the programme, and giving the report of the last meeting; and to all the members and others who have helped to make this meeting a success; especially to the authorities at the Vermont Experiment Station for their inclination to recognize our pursuit.

This resolution was passed:

Resolved, That it having come to our knowledge that the firm of Blake & Ripley have reduced their commission for selling honey to 5 per cent, it is the sense of the bee-keepers in convention assembled that we express our thanks to this firm and any or all others that have made this reduction in their commission.

FEEDING BACK EXTRACTED HONEY.

A very interesting discussion on "Feeding Back Extracted Honey to Get Partly Filled Sections Completed," brought out many facts relating to the practice. To make it a success it should be done as soon as possible after the honey-flow ceases. The brood-nest should be contracted, and as few colonies used as is consistent. The honey should be slightly diluted, and fed rapidly. It is not advisable except with sections nearly full, at present prices of comb and extracted honey.

FEEDING BEES FOR WINTER.

R. H. Holmes thinks that feeding for winter does not pay ordinarily. Much is due to locality. Where it is necessary to feed he advises doing so the first of August, or after breeding is over. He does not wish for late breeding. Feed rapidly, and do not disturb the brood-nest after feeding. If it becomes necessary to give combs of sealed honey after cold weather comes, place them at one side of the cluster, but do not break the cluster.

RELATIVE PROFIT OF COMB AND EXTRACTED HONEY.

W. G. Larrabee gave some facts in regard to the relative profit of comb and extracted honey. He finds the profit depends upon circumstances. A man with only one yard of bees and plenty of time

can get pay for his time in working for comb honey. If he has out-apiaries he must hire help, or run them for extracted honey. A good crop of extracted honey can be secured in an out-apairy. Honey can be secured in an out-apairy with very little labor, and at more profit than comb honey would give after paying for the extra work. He has to use queen-excluders. The cost of crating it is much less. There is scarcely any swarming.

MISCELLANEOUS QUESTIONS.

The question of contracting the brood-nest during the honey-flow was discussed. All seemed to agree that more honey could be secured, and of better shape, yet it necessitated feeding for winter, and this is objectionable.

Can more comb honey be secured by using the two-pound sections? was answered thus: Yes, but the less price and the uncertain market is a bar to their use now.

The adulteration of honey is unknown in Vermont. The law of 1884 was read by the Secretary, which provides a fine of not less than \$35 for adulteration, or knowing sale of adulterated honey. It was thought that this law is sufficient to prevent any adulteration.

The next meeting will be in January, 1894, at Burlington.

The business being finished, the convention adjourned.

There was an informal meeting in the afternoon, when a social visit was enjoyed by those present.

H. W. SCOTT, Sec.

Convention Notices.

NEW YORK.—The next meeting of the Allegany County Bee-Keepers' Association will be held at Belmont, N. Y., on May 4th, 1893, in the Hotel Belmont. All bee-keepers are invited to attend and make it what it should be—an interesting meeting.

H. C. FARNUM, Pres., Transit Bridge, N. Y.

TEXAS.—The Texas State Bee-Keepers' Association will hold its 15th annual convention in Greenville, one mile north of the Court House, at the apiary of Mrs. Jennie Atchley, on Wednesday and Thursday, April the 5th and 6th, 1893. One of the biggest bee-meetings ever held in the South is anticipated. Everybody is invited. No hotel bills to pay. Come one, come all, and let us have a lovely meeting, and an enjoyable time. All bee-keepers invited to bring along something to exhibit.

A. H. JONES, Sec.

Golden, Texas.



Further Details of Packing Bees for Winter.

Written for the American Bee Journal
BY JAMES A. GREEN.

(Continued from page 244.)

The outer cases which I use for packing 4 colonies were made of some refuse inch lumber I happened to have. The only objection to the use of such lumber is its weight—a matter of little consequence when two can work together in packing and unpacking. If new lumber is to be used in making them, I would get common lumber, and have it split and planed on one side. Packing cases made of such lumber are lighter, easier to handle, and may be kept neatly painted if desired.

I formerly advocated making outer cases of lath, and most of my boxes for packing single colonies are made of that material. Lath is the cheapest material that can be used for the purpose, and it has some other good points in its favor; but all things considered, I would prefer to use wider and better lumber.

The boxes are made of such size that when put over the hives there is a space of 4 inches for packing all around the outside of the hives, and 8 inches on top. This space is quite sufficient to allow the use of coarse packing material, such as planer shavings, leaves, straw, or any other material of this nature that is easily obtained. Where sawdust can be easily obtained—it is somewhat expensive, and hard to get here—it is perhaps better than a looser and more open material. When it is used, the thickness of the packing may be somewhat less—say 2 or 3 inches at the sides, and 6 inches on top.

The wintering cases that have been offered for sale by several supply dealers are not large enough to admit of a sufficient quantity of packing material, especially on top.

Chaff is a good packing material as long as it is kept dry. A serious objec-

tion to its use, sometimes, is that the grain which it is apt to contain attracts mice, which often find their way into the hive and greatly injure or destroy the colony.

Perhaps the best packing material, cost not taken into consideration, is ground cork. Cork is specially valuable to those who think it necessary to use a porous covering for the top of the hive, with some absorbing material, in order that the moisture generated by the bees may pass off in this way. This is something that I consider entirely unnecessary. In preparing my bees for winter I leave on the flat board cover that covers the top of my hives, and usually this is sealed down tight, which is the way the bees will always have it if they are given the opportunity before cold weather comes.

I will say right here, though, that I believe that bees will go through the winter just as well if a porous covering is used, which, while not permitting a draft, allows a very slow circulation of air that will carry upward the moisture of the hive. With very large hives having only a small entrance, perhaps this is the best plan. But as soon as the bees begin to rear brood in the spring, it is very desirable that the hive should be perfectly tight on top. As I do not believe in disturbing bees in early spring to make any changes in their hives, I prefer to have the top sealed down tight at all times, and avoid, as far as possible, loosening the covers after the bees have sealed them down tight in the fall.

Some inquire if a dead-air space would not be as good as the more troublesome packing. Dry air is a most perfect non-conductor, and in all our packing the air that is contained in the interstices is of more value in retaining heat than the packing material itself. A perfect dead-air space, if it could be secured, would be as good a protection against cold as could be devised. Practically, though, a "dead-air space," as a protection against cold, is an impossibility.

Heat is conveyed not only by conduction and radiation, but by "convection," the name given to that process by which heat is carried by moving particles of air, or other gas or liquid. If a body of air is confined between two walls, even though the enclosure is perfectly airtight, if one wall is warmer than the other, or any part of the interior, currents of air will be set up that will carry the heat to the colder portions. Particles of air coming in contact with the warmer wall are heated, and rise. Their place is taken by colder particles,

and this procession of heat-bearing particles of air is continued until there is a perfect equilibrium of heat throughout the enclosure. To obtain the full benefit of the non-conducting qualities of air, we must therefore confine it into very small spaces, so that any motion of its particles may be as far as possible prevented. Other things being equal, that is the best non-conductor that contains most air, finely divided and incapable of motion.

Mr. M. M. Baldridge has very kindly sent me samples of a paper roofing that he has used for covering packing cases, that is certainly far superior to anything of the kind I ever saw before. It is called "Bodilene Roofing." The cost is said to be about the same as good shingles. It would be much lighter, and is apparently very durable. It is likely that it might be profitably used for covering bee-hives instead of tin. It is made for roofing in sheets 26x38 inches, and is made to lap much the same as roofing iron.

A correspondent on page 151 advises packing 8 colonies in one box. There would indeed be economy of heat, and in the material required for making such packing boxes. But such boxes would, from their size, be much more unwieldy, especially the covers. The disturbance of the bees, which is unavoidable in all handling where more than one colony is packed in a box, would be doubled. Eight hives would be too many to have in a group for summer, and it would be troublesome to move that number close together from ordinary positions. They could not be placed so as to form a compact bunch, with the entrances on all sides as he suggests, unless half of them had the entrance at the side of the hive, which would not be desirable. Neither do I think it would be best to have any face the north, nor would it be convenient to work around hives that could be reached only from the front.

Ottawa, Ills.

Bee-Hives—A New One that May Prove Valuable.

Written for the American Bee Journal

W. J. CULLINAN.

Notwithstanding all that has been said and written to the contrary, and the slight importance attached to this very important part of the machinery of practical apiculture, I am inclined to believe that the kind of hive we use has

as much to do with our success, comparatively speaking, as the kind of bees we keep; and not only does the hive cut an important figure in the successful keeping of bees, and the economical production of honey, but the frame also, and the two together go a long way toward solving the problem of cheap production; and since it is only by cutting down the cost of production that we can cope with a declining market, and get any profit out of the business, this question of *cheap production* becomes of paramount importance. I hold that the first move in the direction of cheapening production is to lessen labor; and how shall we expect to lessen labor except through ease and rapidity of manipulation?

If we can so construct our hives and frames (of the latter I may speak later), and change our manner of manipulation that one man can do the work of two, and at the same time obtain as good or better results than formerly, may we not add the wages of one man for every day we work in the apiary to our former profits? Of course it will cost something to make the change; but suppose it costs all of the extra profits the first year, we are really not out anything, and we can put those extra profits into our pocket each year thereafter, and be greatly benefited.

According to my notion, a bee-hive for the general bee-keeper should possess at least these three essential features:

1st. The successful wintering and springing, and comfortable summering of bees out-of-doors, without other protection than the hive, for so most of the bees are kept.

2nd. The encouragement of brood-rearing to the highest possible degree at certain times, as the case requires.

3rd. It should be light, and subject to easy and rapid manipulation at all times.

It is claimed by many that bees winter as well in single-walled as in double-walled hives, but I am inclined to doubt it in case of severe winters. I have tested them side by side, but not in a severe winter, and while they did go through the winter in the single-walled hives in about as good condition, they fell behind very appreciably when spring came, and did not come up to the honey-flow in as good condition by one-third as they did in the double-walled hives. And now, after an experience of four years with the same, my preference is for a thick-walled hive—especially where they are to stand out-of-doors the year

around; in other words, where you want an all-purpose hive.

The shallow sectional hive which admits of the easy, gradual and at the same time highest expansion of the brood-chamber at the proper time, and its sudden contraction at the beginning of the honey-flow, and entailing the smallest possible outlay of time and labor will, in the course of time, command more attention than it does at present. But the shallow sectional hive as heretofore constructed has, so far as I can learn, always been a thin-walled hive; and this, while it facilitates manipulation, necessitates packing in the fall, and unpacking in the spring, thereby entailing considerable extra labor. What we want in an all-purpose, out-door hive is a sectional hive so constructed as to be capable of resisting the extremes of heat and cold, without the expense of outside cases, or the trouble of packing or unpacking.

Mr. Henry Hayck, an Illinois bee-keeper, has lately devised and constructed a hive which fills the bill more nearly than anything I have yet seen. In its construction, which is both simple and practical, it combines, to a wonderful degree, the advantages of the old straw skep of Germany with those of the modern sectional hive. It is a sectional hive with thick walls; the sections are 7 inches deep (but may be made of any depth desired), $1\frac{1}{2}$ inches thick, and made of straw. The walls being thick, it resists heat and cold as well as a chaff hive. The sections being light, may be as easily and rapidly manipulated as any sectional hive made of boards. The exterior being reasonably smooth, may be painted, and Mr. H. says it will last as long, if not longer, than the average board hive.

The Hayck Brothers have used this hive in their apiary side by side with the Heddon, American and Langstroth, and they give it the preference over either of the others. The present very severe winter will show which is the better winter domicile for the bees.

I have no interest in this hive only as it interests bee-keepers in general, but I do believe it is going to meet a long-felt want in the line of a cheap, easily manipulated and practical general-purpose hive. It may be made to take either the hanging or standing frame, and the thickness of the walls may be modified in thickness, I believe, to suit the notions of the individual bee-keeper.

Adams Co., Ills.

Things Learned from Experience in Wintering Bees.

Written for the American Bee Journal
BY O. S. BROWN, M. D.

For the past six years I have been experimenting as to which was the best to place absorbents or non-absorbents directly over the cluster. Thinking that the information thus gained would be of interest to readers of the BEE JOURNAL, I will give the various things tried, and the conclusions drawn from these experiments.

I have tried, thick and thin boards, with and without chaff covering them; layers of old newspapers covered with chaff; mats of brussels carpet and burlap covered with chaff; oil-cloth covered with chaff; Hill's method and short sticks across the frames, with all the above excepting board covers; also laid covers flat upon the frames; oats, wheat and timothy chaff, finely cut; hay and oats, or wheat straw, forest leaves; old rags, old papers torn into bits; planing mill shavings, and dry sawdust, excelsior, and several layers of old carpet.

From all the experiments, I have gleaned the following facts about wintering bees in this locality:

1st. That next to plenty of good stores, the next most important requisite to safe wintering is—to have warm, dry absorbents placed directly over the cluster, so that this material will absorb all moisture given off by the bees.

2nd. That it makes but little difference what the absorbent is composed of, so that it will readily absorb, and that the hive keeps it from outside moisture.

3rd. That the absorbents must not be placed too thick, or the moisture will not pass through them.

4th. That it is better during the winter, whenever a bright, warm day comes, to remove the top of the hive, and let the sun shine directly upon the absorbents for some hours, to dry the moisture found collected on top of the absorbents.

5th. That it is better to have the absorbents in the form of mats or cushions, for convenience.

6th. That it is of no benefit to use cross sticks or Hill's device under the absorbents, nor to make winter passages in the combs; for the bees will winter just as well without any of these.

7th. That for all ordinary-sized colonies, it is useless to remove the brood-frames and replace by absorbents or solid division-boards.

8th. That in this locality it makes but little difference whether a single or double walled hive is used, having air space or chaff packed, just so the absorbents are placed over the cluster.

9th. That unless you "sun" and air the packing frequently during the winter, your bees will suffer from dampness.

10th. That the absorbents are of much benefit in the late spring to protect the brood from the sudden changes we have here.

Londonderry, Ohio.



Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Bees are All O. K.

My bees are all O. K. at this writing, in the cellar. I had 5 colonies, and bought 4 more of Italians at an auction for \$21.

JNO. H. RUPP.
Washington, Kan., Feb. 4, 1893.

Skunks in the Apiary, Etc.

There are a great many skunks where I live. Mr. H. C. Farnum says that they dig at the front of the hive. He did not say where it was—in the dirt, or whether they dug at the hive-entrance. We are now having some cold weather, but the bees have begun to rear considerable brood.

T. W. WHEELER.
Menardville, Texas, Feb. 3, 1893.

Cold Weather Long Continued.

I have just looked my bees over after our unusually long spell of cold weather, ranging from 13° below zero to a few degrees above, and I find those with sealed covers in bad condition, and several colonies dead, that had plenty of bees and an abundance of stores. The hives were nearly full of frost and ice, while those with cushions on top so far are all right, with little frost in the hives. My hives are double, with so-

called dead-air space, and with cushions on; last winter they wintered nicely. I do not think I shall care to try the Root's sealed covers any more.

Bees have not had a chance to fly here since the first of November, and I fear if this cold weather lasts much longer without a chance for them to have a cleansing flight, there will be few colonies left in the spring. What bees are kept in this vicinity are wintered out-of-doors. We do not get the large amounts of honey here in southern New Hampshire that they do in many places. Last year my surplus averaged about 25 pounds per colony, spring count, about half extracted, with about 25 per cent. increase of colonies.

GEO. S. WHEELER.
New Ipswich, N. H., Feb. 8, 1893.

Did Well for a Poor Season.

I have been keeping a few colonies of bees several years, and concluded to increase the number last spring. Last summer I had 6 old colonies, and 6 first swarms, which stored 320 pounds of honey, and it was a poor season. I have 16 colonies in the cellar now.

S. M. ROBERTSON.
Grey Eagle, Minn., Jan. 28, 1893.

Bees in Fine Condition.

My bees, at present, are in fine condition on the summer stands, packed in fine hay, and a roof over to keep all dry. I got about 50 pounds of comb honey to the colony, spring count, last year. All have plenty of honey to winter on, and of a good quality. Bees are not so plentiful now as they were 18 months ago. We have had plenty of zero weather for the last two months.

LEE POWELSON.
Batavia, Iowa, Jan. 31, 1893.

Bees Trying to Get Out of the Hives.

I started last spring with 3 colonies of bees, and of course I wanted to increase the number, so I did not put on the surplus cases until late, and, to my surprise, they did not swarm, and did not store one ounce of surplus honey. But they have plenty of stores for winter. I bought 9 colonies more last fall, of my neighbors, which I think will give me a good start for next spring, if I have success in wintering.

They are all packed in straw, with chaff cushions on top. But the 9 colonies I bought last fall do not act right—

they are all the time trying to gnaw out every time the weather slacks a little, so they can stir out a peg. I have a fine screen tacked over the entrance, so they cannot get out. An old bee-keeping friend told me that he never had good luck in wintering a colony of bees when they acted like that; they always died out in the spring; so this somewhat discourages me. If any other bee-keepers have had such experience, I would like to hear from them through the BEE JOURNAL.

CHAS. C. CHAMBERLIN.
Romeo, Mich., Feb. 4, 1893.

Pretty Cold for the Bees.

I started last fall with 90 hives well stocked with bees. They had a flight the last of November, and since then there have been very few days that the temperature has been above 40°. It has been so cold that the ice has formed in the hives so that I cannot poke the dead bees out as I usually do. This morning the temperature was 2° below zero, with the wind in the west, and blowing quite hard. If this weather continues, I think there will be a market for all the honey the bees gather the coming season.

EDWIN HUTCHINSON.
East Avon, N. Y., Feb. 8, 1893.

Colonies in Good Condition.

I have kept bees for 15 years, but previous to my sending for the BEE JOURNAL, three years ago, I knew little about caring for them, except what I learned by experience. I had them in old-fashioned hives, and got little honey; now I have all in Langstroth hives. I have 25 colonies in good condition in the cellar, in a room partitioned off on purpose for the bees. I have a good cellar, and have always had good luck in wintering them in the cellar. We got no surplus honey last year, and this was the third poor honey season. I could not keep bees very well without the BEE JOURNAL. Every bee-keeper should take it.

L. A. STICKNEY.
Plainview, Minn., Jan. 30, 1893.

Coldest Winter in Tennessee.

We have to record the coldest winter here for years. The thermometer, in places, has registered as low as 28° below zero. Hundreds of colonies of bees have been lost by freezing. In this latitude bees are generally wintered on the summer stands, without any extra prep-

aration for winter, but this season shows the necessity of more attention. So far, I have lost none. I began the winter with 30 colonies, on the summer stands, packed with chaff division-boards on each side, with a device similar to the Hill device, and chaff cushions over the brood-chamber. The estimate now is that from 40 to 50 per cent. of the bees of this section have frozen. The temperature here very rarely goes to zero. The lowest last winter was 10° above zero.

H. F. COLEMAN.

Sneedville, Tenn., Jan. 27, 1893.

Commencing to Keep Bees.

Bee-keeping here is only just commencing in the country. There have been bees in the neighboring towns, but for the most part they have been more ornamental than profitable. The bees themselves have lately been trying to break into the country. I gathered 4 colonies out of the woods last summer (a small strip of timber along a creek) on my farm, and on an adjoining ranch within 2 miles there are 100 acres of alfalfa, besides red clover. Our merchants supply their customers with Chicago honey, and I see no reason why we cannot produce our own honey if we give bees the same care and intelligent attention that we do other stock.

D. J. FRASER.

Peabody, Kans., Feb. 6, 1893.

More than Made Expenses.

Three years ago I started with 3 colonies of Italian bees, which increased to 18 during the last three summers. My best colony, last summer, gave me a surplus of comb honey in sections of 54 pounds, and 80 pounds of extracted honey. The poorest colony gave me no comb honey, and 20 pounds of extracted honey. Bee-men around here say the last two summers were poor for bee-keeping. I had my own honey and made expenses. For my work I have 18 colonies on movable-frames, in two story double-walled hives, with plenty of stores, in good condition for winter.

HENRY BOHLMANN.

Defiance, O., Jan. 30, 1893.

Wintering Nicely—Late Queens.

My 200 colonies of bees are wintering nicely. We have had a very severe winter. Bees were confined to their hives without a flight for six weeks or

more. A few days ago we had a little summer weather, which gave me an opportunity to examine them somewhat. My full colonies were in good condition, but I am trying to winter some 50 nuclei colonies which were used for late queen-rearing, which did not do so well. I am wintering 12 nuclei with very late queens. The queens I thought were too late to be fertilized, as I could not find a single drone, yet to my surprise, when examining them, they had young bees hatching in January. How is that? My bees are all on the summer stands, with the exception of the 12 nuclei colonies referred to.

CHAS. H. THIES.

Steeleville, Ills., Feb. 6, 1893.

Mesquite as a Honey-Plant.

All over this southwestern country there grows a scrubby tree called "mesquite," and I want to ask the bee-keepers of Texas and Arizona what they know about mesquite as a honey-producing plant. I have had some evidence on the question, but not enough to be entirely satisfactory. I am of the opinion that it outrivals the basswood of the North, both in quantity and quality, and that the reason it has not been more noticed is that it comes before the average bee-keeper has bees to gather the harvest, and consequently they have not found out that they were losing anything, or that the mesquite is a plant that yielded nectar. It covers a vast area of country that is almost entirely unoccupied by bee-men. I estimate the extent of the region where this tree grows to be not less than one million square miles.

J. G. STEWART.

Las Cruces, New Mex., Jan. 30, 1893.

Wisconsin Honey Exhibit.

I think the Wisconsin Bee-Keepers' Association are fortunate in securing the services of Mr. Franklin Wilcox, of Mauston, Wis., to take charge of their honey exhibit at the World's Columbian Exposition. Mr. W. is a bee-keeper of large experience and sound judgment, and thoroughly qualified for the position. It is sincerely hoped that all Wisconsin bee-keepers will co-operate with him in order to make the bee-keepers' department of the Exposition a grand success. The Executive Commissioner of the World's Fair for Wisconsin—Hon. R. B. Kirkland—has placed the honey display of Wisconsin in charge of the State Bee-Keepers' Association, and all

who wish to participate in the honey exhibit of Wisconsin must address the agent of the association, or its Corresponding Secretary (your humble servant), who will give you full information regarding the subject.

Madison, Wis. J. W. VANCE, M. D.

Gathering Honey in Florida.

Bees are gathering honey very fast from peach-bloom and the ti-ti. They carry in very pretty pollen, and drop down at the entrances of their hives like shot. The bees of this locality, with few exceptions, are the common black bees. The honey of this land is good, yet bee-culture is in a very backward condition. The weather is so lovely here that it does not seem possible that my bee-friends in the North are in the midst of snow and ice.

MRS. L. HARRISON.

St. Andrew's Bay, Fla., Feb. 22, 1893.

[We were pleased to get the above from our friend, Mrs. Harrison, from her Southern home in the winter. How delightful it must be where she is. We just wondered if she wouldn't favor her BEE JOURNAL friends with an occasional note from that "Land of Flowers" and honey. We are sure all would enjoy reading anything that she might choose to send.—Ed.]

Bee-Keeping in "Egypt."

My bees are doing well. They had 3 or 4 day's flight, after prolonged zero freezing. They are on the summer stands without any protection. My neighbors say they lost almost all theirs this winter. I owe my success to reading the BEE JOURNAL and other bee-literature on feeding and ventilating. I am well pleased with the BEE JOURNAL; I can't get along without it. We got scarcely any honey in 1892; 1891 was a glorious year down here in "Egypt"—would like to see 1893 likewise. I have the little brown bees—4 colonies in movable-frame hives, and 11 in box-hives. I will get them all into frame hives in the spring. I would like to Italianize my bees.

ALLEN SPRINGER.

Rose Bud, Ills., Feb. 3, 1893.

Have You Read that wonderful book
Premium offer on page 261?



AMERICAN BEE JOURNAL

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GEORGE W. YORK & CO.,

At One Dollar a Year,

56 FIFTH AVENUE, CHICAGO, ILLS.

Special Notices.

The Date on the wrapper-label of this paper indicates the end of the month to which you have paid for the JOURNAL. If that is past, please send us one dollar to pay for another year. This shows that Mr. Porter has paid his subscription up to the end of December, 1893:

Wallace Porter Dec93
Suffield, Portage co, Ohio

Local Checks.—Please do not send us checks on local banks. We have to pay from 15 to 25 cents each to get them cashed here, which is quite a useless expense, when you can either send money by registered letter, or get an express or post-office Money Order. We prefer the express Money Order, if you can get that; otherwise the post-office Money Order or registered letter.

The Silver Cross, the official organ of the "International Order of The King's Daughters and Sons," is the only journal that publishes the Popular Drawing-Room Bible Talks of Mrs. Margaret Bottome, President of the Order. For many years Mrs. Bottome has inspired large audiences to noble living and unselfish service by these familiar talks on Scripture topics. They have been stenographically reported and revised by the author for *The Silver Cross*. This magazine is the only medium of interchange between members of the Order. Address, Silver Cross Pub. Co., 158 W. 23rd St., New York.

CONVENTION DIRECTORY.

Time and place of meeting.

1893.
April 5, 6.—Texas State, at Greenville, Tex.
A. H. Jones, Sec., Golden, Tex.

May 4.—Allegany Co., at Belmont, N. Y.
H. C. Farnum, Pres., Transit Bridge, N. Y.

In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRESIDENT—Dr. C. C. Miller...Marengo, Ills.
VICE-PRES.—J. E. Crane.....Middlebury, Vt.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.

Annual Catalogues or Price-Lists we have received from—

Geo. E. Hilton, Fremont, Mich.—Apriarian Supplies.

George Rall, Frenchville, Wis.—Apriarian Supplies.

J. D. Givens, Lisbon, Tex.—Golden Italian Queens.

Vaughn's Seed Store, Chicago, Ills.—All kinds of Seeds.

M. H. Hunt, Bell Branch, Mich.—Bee-Keepers' Supplies.

James Vick's Sons, Rochester, N. Y.
All kinds of Seeds.

Green's Nursery Co., Rochester, N. Y.
—Fruit and Flowers.

St. Joseph Apriary Co., St. Joseph, Mo.
Bee-Keepers' Supplies.

J. F. Michael, German, Ohio.—Golden Italian Queens and Bee-Supplies.

J. D. Goodrich, East Hardwick, Vt.—Foundation, Sections, Hives, and other Apriarian Supplies.

Chas. H. Thies, Steeleville, Ills.—Apriarian Supplies, Golden Italian Queens, and Pure Bred Poultry.

Chicago Bee-Keepers' Supply Co.,
Topeka, Kans., and Chicago, Ills.—General Supplies for Bee-Keepers.

Leahy Mfg. Co., Higginsville, Mo.—
Bee-Hives, Bees, Queens, Honey, Beeswax and Bee-Keepers' Supplies.

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, February 25th, 1893:

CHICAGO, ILL.—There are occasional sales of best grades of comb honey, but the retailers are not yet sold out on supply laid in before the holidays. Prices are a little easier, especially on that which will not grade "fancy"—such brings 17@18c., and other grades 12@16c. Extracted, 6@9c., as to quality. Beeswax—22@25c. R. A. B. & Co.

CHICAGO, ILL.—Fancy stock is very scarce, with plenty of inquiry, with good prices offered for same. It sells readily at 18c.; No. 1 comb, 16@17c. Dark sells slow. White extracted, fair supply, with good demand at 8%; dark, 6@7c. Beeswax—23@25c. J. A. L.

CINCINNATI, OHIO.—Demand from manufacturers is slow, but the demand is good for extracted for family use. It brings 6@8c.—No good comb is on our market. It would bring 14@16c.

Beeswax—Demand good, at 23@25c for good to choice yellow. Supply good. C. F. M. & S.

NEW YORK, N. Y.—Demand for comb honey is very light. White fancy stock is well cleaned up. The market is well stocked with off grades and buckwheat, and prices are irregular. Extracted is in good demand and stocks are light. We quote: Basswood and white clover, 8@8½c.; buckwheat, 6@6½c.; Southern, 70@75c. per gallon.

Beeswax—25@27c. H. B. & S.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality, 1-lbs. Beeswax is neglected at 22@23c. S. L. & S.

BOSTON, MASS.—Honey is selling slow and prices are lower. Best 1-lb. comb, 16@17c.—Extracted, 6@10c.

Beeswax—None on hand. B. & R.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 18c. Extracted, 6@7c. No beeswax on the market. H. & B.

MINNEAPOLIS, MINN.—The market is good. We quote: Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13@14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs, 9@10c. J. A. S. & C.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6c.

Beeswax—20@23c. C.-M. C. C.

ALBANY, N. Y.—Our stock of honey is light and also receipts. Demand keeps up better than usual this season. We are selling white comb honey at 14@16c.; mixed, 12@13c.; dark, 10@11c. Extracted, white, 9@9½c.; mixed, 7@8c.; dark, 7@7½c. Beeswax, 28@30c. H. R. W.

Please Don't send to us for bee-keepers' supplies. We do not deal in them. If in need of anything for the apiary except a good bee paper or book, just send for the catalogues of some of our advertisers. They will be glad to fit you out, and do it well.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

R. A. BURNETT & Co., 161 South Water Street.
J. A. LAMON, 44 & 46 South Water Street

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDEBRAND BROS. & SEGELEN,
28 & 30 West Broadway.

San Francisco, Calif.

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

Minneapolis, Minn.

J. A. SHEA & CO., 14 & 16 Hennepin Avenue

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

"**The Winter Problem** in Bee-Keeping" is the title of a splendid pamphlet by Mr. G. R. Pierce, of Iowa, a bee-keeper of 26 years' experience. It is 6x9 inches in size, has 76 pages, and is a clear exposition of the conditions essential to success in the winter and spring management of the apriary. Price, postpaid, 50 cents; or given as a premium for getting one new subscriber to the BEE JOURNAL for a year. Clubbed with the BEE JOURNAL one year for \$1.30. Send to us for a copy.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at 10 cents per line, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED—A second-hand Barnes' Circular Saw. W. J. SHELDON, Parker, S. D.

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